Effects of a Late Summer Sustained Pulse Flow from Lewiston Dam on the Water Temperatures of the Trinity and Klamath Rivers, 2004.

By

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Abstract

From August 22 to September 12, 2004, flow from Lewiston Dam was maintained at between 1700 to 800 cfs, a 3 to 4 –fold increase over typical base summer flows of 450 cfs. The purpose of the increased flow as to improve the water quality of the Klamath River below the Trinity's confluence to potentially avert another large scale die-off of adult salmon in the lower Klamath River similar to that observed in 2002. The increase in flow resulted in marked temperature differences along the Trinity River with the most notable differences occurred in downstream reaches. Average daily water temperatures at the mouth of the Trinity River became as great as 3.5 ˚C colder than the Klamath River. In combination, the increased flow and colder water temperatures of the Trinity River acted to decrease the average daily water temperatures of the Klamath River by 1.5 ˚C or below 21.0 ˚C.

Preliminary results of the monitoring are available by contacting the presenter at the above email address or through the website of the North Coast Regional Water Quality Control Boards (contact: Matt St. John).

Final reports on the influences of Lewiston Dam releases on the Trinity River and the lower Klamath River during the years of 2002, 2003, and 2004 are available on the Arcata Fish and Wildlife Office's website: http://arcata.fws.gov/fisheries.